



# THE EFFECT OF EFFLEURAGE MASSAGE ON REDUCING LABOR PAIN IN LABORING MOTHERS AT PUSKESMAS SARIMOTANDANG SIDAMANIK YEAR 2022

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## ABSTRACT

**Background:** Massage or massage on the abdomen (effleurage) is a form of skin stimulation used during labor in reducing pain effectively. This study aims to determine the effect of Massage Effleurage on Reducing Labor Pain in Maternity. **Method:** This research is an analytical research with experimental study design with one group pre and posttest design. The population in this study were all laboring mothers at Sarimotandang Health Center as many as 35 people. Data collection was done by distributing questionnaires to respondents. Data processing starts from editing, coding, entry, cleaning and tabulating data. Data analysis using paired T test. **Results:** The results showed that there was an effect of labor pain in laboring mothers before and after being given effleurage massage ( $p = 0.000$ ). **Conclusion:** Thus it is recommended to the mother of the baby to do counseling to health workers related to the problem of labor pain.

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## 1. INTRODUCTION

Labor pain is a physiological condition but it is something that causes mothers to feel that childbirth is a painful and frightening event. generally mothers state that they cannot stand the pain felt, especially in the abdomen, waist, and spread to the spine, so that the pain is felt continuously in the first stage of labor (Lante, N & Badar, Y.H, 2019).

Labor pain can also cause hyperventilation so that oxygen demand increases, increases blood pressure, and reduces intestinal motility and vesica urinaria. This situation will stimulate an increase in catecholamines which can cause disturbances in the strength of uterine contractions

resulting in uterine inertia. If labor pain is not resolved, it will cause prolonged parturition (Anita, 2017).

The World Health Organization (WHO) regarding the national health status on the achievement of the Sustainable Development Goals (SDGs) target states that globally around 830 women die every day due to complications during pregnancy and childbirth, with a maternal mortality rate (MMR) of 216 per 100,000 live births. The MMR ratio is still considered quite high as it is targeted to be 70 per 100,000 live births by 2030 (WHO, 2017).

Management and supervision of labor pain, especially in the first stage, is very important, because it is the determining point whether the laboring mother can undergo normal labor or end with an action due to complications caused by severe pain. Pain in labor can be reduced using pharmacological and non-pharmacological methods. If possible the choice of non-pharmacological methods for pain management should be considered before using analgesic drugs. Some pharmacological pain management is mostly a medical action and has side effects for both mother and fetus (Seftianingtyas, WN, et al, 2021).

Based on the results of an initial survey of 10 mothers who had been interviewed by the author, almost all mothers stated that they had never done effleurage massage in reducing labor pain, because they did not know about the benefits of effleurage massage on labor. Therefore, based on this phenomenon, the researcher is interested in conducting research on the Effect of Massage Effleurage on the Decrease in Labor Pain in Maternity Women at the Sarimotandang Health Center, Sidamanik District, Simalungan Regency in 2022.

## 2. RESEARCH METHODE

This research is an analytical study with an experimental study design with a one group pre and posttest design used to determine the Effect of Effleurage Massage on Decreasing Labor Pain in Maternity. The population in this study were all mothers of babies at the Sarimotandang Health Center as many as 35 people. The sample in this study was used as total sampling.

## 3. RESULT AND ANALYSIS

**Table 1 Average labor pain in laboring mothers before and after Effleurage Massage at Sarimatondang Health Center, Sidamanik District, Simalungun Regency, 2022**

No	Variabel	N	Minumum	Maksimum	Mean	SD
<b>Pretest</b>						
1	Nyeri Persalinan pada ibu bersalin	35	5	9	6.57	1,065
<b>Posttest</b>						
2	Nyeri Persalinan Pada Ibu bersalin	35	5	6	3.34	0,938

Table 1 shows that the mean labor pain in laboring women before effleurage massage was 6.57 with a standard deviation of 1.065. The mean labor pain in laboring women after effleurage massage is 3.34 with a standard deviation of 0.938.

**Table 2. The Effect of Effleurage Massage on Reducing Labor Pain in Active Phase I Mothers at the Sarimatondang Health Center, Sidamanik District, Simalungun Regency, 2022**

No	Variabel	n	Rerata±s.b	Perbedaan rerata	p value
1	Nyeri persalinan ibu bersalin sebelum diberikan massage effleurage (pretest)	35	6.57±1,065		
2	Nyeri persalinan ibu bersalin sebelum diberikan massage effleurage & nyeri persalinan ibu bersalin sesudah diberikan (postest)	35	3.34±0,938	0,127	0,000

Table 2 shows that the mean labor pain in laboring women before effleurage massage is 6.57 with a standard deviation of 1.065, while the mean labor pain in laboring women after effleurage massage is 3.34 with a standard deviation of 0.938. The average difference in labor pain in laboring women before and after effleurage massage is 0.127. The results of statistical tests showed that there was an effect of effleurage massage on reducing labor pain in laboring women at the Sarimatondang Health Center, Sidamanik District, with a value of  $p = 0.000$ .

## DISCUSSION

### Average Labor Pain in Active Phase I Mother Before and After Effleurage Massage

The results showed that the mean labor pain in laboring women before effleurage massage was 6.57 with a standard deviation of 1.065, while the mean labor pain in laboring women after effleurage massage was 3.34 with a standard deviation of 0.938. This means that message effleurage can reduce labor pain in laboring women. It can be seen from the results of the study that laboring women who do effleurage massage show that there is a significant difference before and after the intervention.

Physiologically, the whole body of a woman in labor will experience pain during her labor process, so it cannot be denied, that in the process of labor, labor pain includes things that cannot be separated from the labor process (Kastubi, 2017).

Massage or abdominal massage (effleurage) is a form of skin stimulation used during labor to effectively reduce pain. Effleurage comes from the French language. Effleurage is a massage technique in the form of soft, slow, and long strokes or not broken. This technique creates a relaxing effect. In labor, effleurage is performed using soft and light fingertips. Do the strokes lightly and without strong pressure, but try to keep the fingertips off the surface of the skin. Effleurage massage can also be performed on the back. The main purpose is relaxation (Mons Dragon, in Handayani, et al 2017).

### The Effect of Effleurage Massage on Reducing Labor Pain in Maternity

Labor pain can be overcome one of them with Effleurage massage. Effleurage massage is one of the massage methods to reduce pain during labor listed in the Summary of pain relief measures during labor, where in phase I latent phase (opening 0-3 cm) and active phase (opening 4-7 cm) activities that can be done by laboring mothers is effleurage. Effleurage is a light massage using the fingers of the hands, usually on the abdomen, in rhythm with breathing during contractions. Effleurage can be done by the laboring mother herself or a labor companion during contractions. The main action of effleurage massage is the application of Gate Control theory which can "close

the gate" to inhibit the passage of pain stimuli to higher centers in the central nervous system (Herinawati et al., 2019).

The results of the study (Fitriani, D & Sitepu, P, 2018) showed that there was an effect after being given effleurage massage on lowering blood pressure in hypertensive patients in the Bakti Jaya Setu South Tangerang Health Center area, with a decrease in the average systolic blood pressure value before and after the intervention of 19.4 mmHg and diastolic blood pressure of 9.8 mmHg with a value of P value = 0.005. Likewise research (Seftianingtyas, WN, et al, 2021) there is an effect of effleurage massage on pain levels in laboring mothers ( $p = 0.001 < 0.05$ ).

This research is supported by (Sri Wahyuni, 2017), namely the results of the analysis of the effect of effleurage massage on reducing the intensity of labor pain during the active phase I obtained a value of  $p = 0.000$ ;  $\alpha = 0.05$ , thus it can be concluded that the provision of effleurage massage is very influential on labor pain during the active phase I at RSU PKU Muhammadiyah Delanggu in 2015. Significant differences indicate that effleurage massage can be used for intervention when experiencing labor pain.

According to the author's assumption, the effleurage massage technique is very easy to do because the implementation technique can be done by the laboring mother herself using both palms of the fingers with circular movements in the abdomen starting from the bottom above the pubic symphysis, leading to the side of the abdomen, continuing to the fundus uteri then down to the umbilicus and back to the lower abdomen next to the pubic symphysis and the selection of massage patterns depending on the wishes of the laboring mother or according to her taste and can give the laboring mother to be comfortable. So that this effleurage massage technique is very important for every laboring mother so that the labor pain process can be overcome and the laboring mother can carry out labor comfortably.

#### 4. CONCLUSION

Based on the results of research on the effect of effleurage massage on reducing labor pain in mothers in partu kala 1 active phase, the following conclusions can be drawn:

1. The mean labor pain in laboring women before effleurage massage is 6.57 with a standard deviation of 1.065, while the mean labor pain in laboring women after effleurage massage is 3.34 with a standard deviation of 0.938. The difference in mean labor pain in laboring women before and after effleurage massage is 0.127.
2. There is an effect of effleurage massage on reducing labor pain in laboring women at the Sarimatondang Health Center, Sidamanik District, with a value of  $p = 0.000$ .

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